

**Digital Subscriber Line Access Multiplexer (DSLAM)**—Technology that concentrates or aggregates traffic in DSL networks. Located in the central office or in a remote terminal.

**Discount Rate**—The annual percentage rate used to determine the current value of future cash flows.

**Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA)**—An approximate measure of a company's operating cash flow based on data from the company's income statement. Calculated by looking at earnings, which are calculated by subtracting opex and SG&A from net revenues, before the deduction of interest expenses, taxes, depreciation and amortization. This earnings measure is of particular interest in cases where companies have large amounts of fixed assets which are subject to large depreciation.

**Ethernet Passive Optical Network (EPON)**—A type of PON standardized by the IEEE, offering downstream capacities of up to 1.25 Gbps and upstream capacities of up to 1.25 Gbps, shared among a limited number of end users.

**Evolution-Data Optimized (EV-DO)**—A 3G wireless radio broadband data standard that enables faster speeds than are available in existing CDMA networks or other 2G services, such as GPRS or EDGE.

**Fast Ethernet (Fast-E)**—A network transmission standard that provides a data rate of 100 Mbps.

**Fiber**—Shorthand for "fiber-optic cable." Fiber-optic cable is the medium associated with the transmission of information as light impulses along a strand of glass.

**Fiber to the Node (FTTN)**—A high-capacity bandwidth approach that uses both fiber and copper wires. Optical fiber is used from the core of the telco or CATV network to an intelligent node in the neighborhood where copper wire is used for the connection to the end-user, with one node serving perhaps many residences or small businesses. The few 100 meters or so of the local loop from the node to the premises generally is either unshielded twisted pair (UTP) in a telco application or coaxial cable (coax) in an HFC application, although some form of wireless technology is also possible. Known as Fiber to the Neighborhood, or Fiber to the Cabinet (FTTCab), as well.

**Fiber-to-the-Premise (FTTP)**—A fiber-deployment architecture in which optical fiber extends all the way to the customer's premise. Also known as Fiber to the Home (FTTH) or Fiber to the Building (FTTB). Typically using PON for residential deployments.

**Fisher-Pry Model**—A mathematical model used to forecast technology adoption when substitution is driven by superior technology where the new product or service presents some technological advantage over the old one.

**Fixed Wireless (FW)**—Wireless service that uses fixed CPE in addition to (or, possibly, even instead of) mobile portable devices to deliver data services. FW solutions have been deployed as a substitute for wired access technologies. For example, it is being used commercially in the U.S. by Clearwire with WiMAX and Stelera with HSPA, and globally by Telstra with HSPA.

**Gabriel Network Topology**—An approach to modeling efficient (shortest-route) connections between known network nodes, where the links are determined by making a pairwise comparison of points in the context of the points around them. In a classic Gabriel network, the set of points should not include any co-incident points, that is two points that lie exactly at the same location.

**Gigabit Ethernet (Gig-E)**—A network transmission standard that provides a data rate of 1,000 megabits per second.

**Gigabit Passive Optical Network (GPON)**—A type of PON standardized by the ITU-T, offering downstream capacities of up to 2.5 Gbps and upstream capacities of up to 1.25 Gbps, shared among a limited number of end users.

**Global System for Mobile communication (GSM)**—A second-generation digital mobile cellular technology using a combination of frequency division multiple access (FDMA) and time division multiple access (TDMA). GSM operates in several frequency bands: 400MHz, 900MHz and 1800MHz. On the TDMA side, there are eight timeslots or channels carrying calls, which operate on the same frequency. The standard was jointly developed between European administrations under Groupe Speciale Mobile in the 1980s and introduced commercially in 1991. Unlike other cellular systems, GSM provides a high degree of security by using subscriber identity module (SIM) cards and GSM encryption.

**Gompertz Model**—A mathematical model used to forecast technology adoption when substitution is driven by superior technology, but purchase depends on consumer choice.

*Greenfield*—A network in which a carrier has no infrastructure currently (of that technology), and it needs to be built from scratch.

*High Speed Packet Access (HSPA)*—A family of high-speed 3G digital data services provided by cellular carriers worldwide that uses the GSM technology. HSPA service works with HSPA cell phones as well as laptops and portable devices with HSPA modems. The two established standards of HSPA are HSDPA (Downlink) and HSUPA (Uplink).

*Housing Units (HU)*—Includes a house, an apartment, a mobile home, a group of rooms or a single room that is occupied (or if vacant, is intended for occupancy) as separate living quarters.

*Hybrid Fiber Microwave (HFM)*—A network (usually wireless) whereby the backhaul transport elements of the network are a mixture or combination of fiber-optic facilities and wireless microwave transport.

*Hybrid Fiber Coaxial (HFC)*—Another term for cable systems, which are a combination of fiber (Middle and Second Mile) and coaxial cable (Last Mile).

*Incumbent Local Exchange Carrier (ILEC)*—The dominant local phone carrier within a geographical area. Section 252 of the Telecommunications Act of 1996 defines Incumbent Local Exchange Carrier as a carrier that, as of the date of enactment of the Act, provided local exchange service to a specific area; for example, Verizon, Windstream and Frontier. In contrast, Competitive Access Providers (CAPs) and competitive local exchange carriers (CLECs) are companies that compete against the ILECs in local service areas.

*Integrated Digital Enhanced Network (iDEN)*—A wireless technology from Motorola combining the capabilities of a digital cellular telephone, two-way radio, alphanumeric pager and data/fax modem in a single network. iDEN operates in the 800 MHz, 900MHz and 1.5 GHz bands and is based on time division multiple access (TDMA) and GSM architecture. It uses Motorola's Vector Sum Excited Linear Predictors (VSELP) voice encoder for voice compression and QAM modulation to deliver 64 kbps over a 25 KHz channel.

*Interexchange Carrier (IXC)*—A telecommunications service provider authorized by the FCC to provide interstate, long distance communications services and authorized by the state to provide long distance intrastate communications services. An Interexchange Carrier provides, directly or indirectly, interLATA or intraLATA telephone toll services. May be an individual, partnership, association, joint-stock company, trust, governmental entity or corporation engaged for hire in interstate or foreign communication by wire or radio, and between two or more exchanges. Also known as an Interexchange Common Carrier.

*Internet Service Provider (ISP)*—A company that provides a connection to the public Internet, often owning and operating the Last-Mile connection to end-user locations.

*Investment Gap*—The amount of funding necessary to upgrade or extend existing infrastructure up to the level necessary to support the National Broadband Availability Target, which is referred to in the National Broadband Plan as the Broadband Availability Gap.

*Last Mile*—Refers generally to the transport and transmission of data communications from the demarcation point between the end user's internal network and the carrier's network at the customer premise to the first point of aggregation in the carrier's network (such as a remote terminal, wireless tower location, or HFC node).

*Levelized*—A method, often used in regulatory proceedings, to calculate the annuitized equivalent—i.e., the effective annual value of cash flows—of the costs and revenues associated with building and operating a network. A "levelized" calculation provides a steady cash-flow stream, rather than trying to model or guess the timing of largely unpredictable yet sizable real-world payouts like those for upgrading and repairing equipment. The (net) present value of a levelized cash flow is equal to the (net) present value of actual cash flows.

*Link Budget*—A calculation involving the gain and loss factors associated with the antennas, transmitters, transmission lines and propagation environment used to determine the maximum distance at which a transmitter and receiver can successfully operate.

*Local Access and Transport Area (LATA)*—One of 196 local geographical areas in the U.S. created by the Modified Final Judgment in which a divested Regional Bell operating company (RBOC) was permitted to offer exchange telecommunications and exchange access services.

**Long-Term Evolution (LTE)**—A high performance air interface for cellular mobile communication systems. LTE technology increases the capacity and speed of wireless networks relative to current 3G deployments.

**Microwave**—Microwave transmission refers to the technique of transmitting information over microwave frequencies, using various integrated wireless technologies. Microwaves are short-wavelength, high-frequency signals that occupy the electromagnetic spectrum 1 GHz to roughly 300 GHz, (typically within ITU Radio Band Signal EHF) though definitions vary. This is above the radio frequency range and below the infrared range.

**Middle Mile**—Refers generally to the transport and transmission of data communications from the central office, cable headend or wireless switching station to an Internet point of presence.

**Mobile Switching Center (MSC)**—The mobile switching center (MSC) connects the landline public switched telephone network (PSTN) system to the wireless communication system. The mobile switching center is typically split into a mobile switching center server and a media gateway, and incorporates the bearer independent call control (BICC). The MSC routes the communications to another subscribing wireless unit via a BSC/base station path or via the PSTN/Internet/other network to terminating destination.

**Multiple Input Multiple Output (MIMO)**—An antenna technology for wireless communications in which multiple antennas are used at both the source (transmitter) and the destination (receiver). The antennas at each end of the communications circuit are combined to minimize errors and optimize data speed. MIMO is one of several forms of smart antenna technology, the others being MISO (multiple input, single output) and SIMO (single input, multiple output).

**Multiple System Operator (MSO)**—Typically refers to a firm that owns more than one cable system, but may refer also to an operator of only one system.

**National Broadband Availability Target**—The level of service set in the National Broadband Plan that should be available to every household and business location in the U.S. The initial target is an actual download speed of at least 4 Mbps and an upload speed of at least 1 Mbps, with a proposed review and update every four years.

**Net Present Value (NPV)**—A technique used to assess the current worth of future cash flows by discounting those future cash flows at today's cost of capital. The Net Present Value (NPV) of a project is the total discounted value of all revenues and costs; NPVs greater than zero generate value for a company.

**Node**—An active or passive element in a cable system where Second-Mile fiber connects with coaxial cable.

**Node splitting**—In a cable system, adding infrastructure so that subscribers previously served by a single node are moved to multiple nodes, reducing the number of subscribers per node.

**Operating Expenses (Opex)**—An expense a business incurs over the course of its normal operations. Examples include product overhead, employee salaries and electric bill payments. Importantly, operating expenses on a balance sheet reflect only ordinary expenses rather than unexpected, one-time expenses. One subtracts the operating expense from operating revenue to determine the operating profit.

**Organization for Economic Co-operation and Development (OECD)**—The 30 member countries are: Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States.

**Over-the-top (OTT)**—Carried over an Internet connection. For example, OTT video would include video delivered by YouTube, Hulu and TV Everywhere.

**Passive Optical Network (PON)**—A type of Fiber To The Premise (FTTP) network in which unpowered optical splitters are utilized to enable a single fiber to be shared by multiple end users. There are several varieties of PON currently in use in the U.S., including BPON, EPON and GPON, each of which has its own set of standards and capabilities.

**Plain Old Telephone Service (POTS)**—The basic single line switched access service offered by local exchange carriers to residential and business end users, using loop-start signaling.

**Point of Presence (POP)**—An access point to the Internet. A point of presence is a physical location that houses servers, routers, switches and aggregation equipment.

*Point to point (P2P)*—A type of fiber to the premise network in which each endpoint is connected to its serving office via a dedicated fiber optic strand.

*Present Value (PV)*—The value today of a future payment, or stream of payments, discounted at some appropriate compound discount rate. For example, the present value of \$100 to be received 10 years from now using a discount rate equal to 10% interest compounded annually is about \$38.55.

*Public Switched Telephone Network (PSTN)*—The worldwide collection of interconnected public telephone networks that was designed primarily for voice traffic. The PSTN is a circuit-switched network, in which a dedicated circuit (also referred to as a channel) is established for the duration of a transmission, such as a telephone call. This contrasts with packet switching networks, in which messages are divided into small segments called packets and each packet is sent individually. Packet switching networks were initially designed primarily for data traffic.

*Quadrature Amplitude Modulation (QAM)*—A system of modulation in which data is transferred by modulating the amplitude of two separate carrier waves, mostly sinusoidal, which are out of phase by 90 degrees (sine and cosine). Due to their phase difference, they are called quadrature carriers. Used extensively in cable systems.

*Quality of Service (QoS)*—The ability to provide different priority to different applications, users or data flows, or to guarantee a certain level of performance to a data flow in a broadband network.

*Radio Frequency over Glass (RFoG)*—An evolutionary technology that allows cable companies to offer an all-fiber architecture (not hybrid-fiber coax) without changing modulation schemes. RFoG is an SCTE Interface Practices Subcommittee standard in development for Point to Multipoint (P2MP) operations that has a proposed wavelength plan compatible with data PON solutions including EPON and 10G-EPON.

*Regional Bell Operation Company (RBOC)*—Local exchange carriers formed after the breakup of AT&T in 1984. The seven regional holding companies (RHCs) of roughly equal size were formed as a result of the 1982 Consent Decree AT&T signed with the U.S. Department of Justice, stipulating that it would divest itself of its 22 wholly owned telephone operating companies. The seven RHCs were Ameritech, Bell Atlantic, BellSouth, NYNEX, Pacific Telesis, Southwestern Bell and US West. After a series of acquisitions, mergers and name changes (including one in which a combination of several RHCs reclaimed the original AT&T name), only three of the original seven remain. They are AT&T, Qwest and Verizon. The RBOCs are the incumbent local exchange carriers (ILECs) in their local markets.

*Regional Tandem (RT)*—A tandem switch is an intermediate switch or connection between an originating telephone call or location and the final destination of the call. These are hub facilities that interconnect telephone central office exchanges and are deployed by geographical region within a telco LATA or exchange.

*Remote Terminal*—Telephone communications equipment that is installed within the service area or “neighborhood” that traditionally aggregates and multiplexes telephone local loops and transmits the aggregated signals from the service area back to the telephone central office switch. This has evolved to become the “Node” within a service area in a fiber-to-the-node architecture.

*Second Mile*—Refers generally to the transport and transmission of data communications from the first point of aggregation (such as a remote terminal, wireless tower location, or HFC node) to the point of connection with the Middle Mile transport.

*Selling, General and Administrative expenses (SG&A)*—Corporate overhead costs, including expenses such as marketing, advertising, salaries and rent. SG&A is found on a corporate income statement as a deduction from revenues in calculating operating income.

*Signal to Interference plus Noise Ratio (SINR)*—For a wireless communications device, the ratio of the received strength of the desired signal to the received strength of undesired signals (noise and interference).

*Spectrum Allocation*—The amount of spectrum dedicated (or allocated) to a specific use; in wireless, spectrum allocation is typically made in paired bands, with one band for upstream and the other for downstream.

**Spectrum Band**—The frequency of the carrier wave in wireless communications. Radios can transmit on different frequencies in the same area at the same time without interfering; frequency marks the division of different parts of spectrum for different uses. Frequency is measured in Hertz (Hz); the range of frequency typically used for radio communications is between 10,000 (10 kHz) and 30,000,000,000 Hz (30 GHz). Different frequencies have different natural properties: Lower frequencies travel farther and penetrate solids better, while higher frequencies can carry more information (faster data rates, etc.) The best balance of these properties for the purpose of cell phones is in the range of roughly 700-2,500 MHz. A specific range of frequencies allocated for a specific purpose is called a “band.”

**Switched Digital Video (SDV)**—A network scheme for distributing digital video via a cable more efficiently to free up bandwidth for other uses. Only channels being watched by end-users in a given node are transmitted to that node.

**Take rate**—The ratio of the number of premises that elect to take a service divided by the total number of premises in a market area; effectively a penetration rate of homes passed.

**Time Division Multiple Access (TDMA)**—Technology used in digital cellular telephone communication that divides each cellular channel into three time slots in order to increase the amount of data that can be carried. TDMA is used by Digital-American Mobile Phone Service (D-AMPS), Global System for Mobile communications (GSM), and Personal Digital Cellular (PDC). Each of these systems implements TDMA in somewhat different and potentially incompatible ways. An alternative multiplexing scheme to FDMA with TDMA is CDMA (code division multiple access), which takes the entire allocated frequency range for a given service and multiplexes information for all users across the spectrum range at the same time.

**Universal Mobile Telecommunications System (UMTS)**—Third-generation (3G) broadband, packet-based transmission of text, digitized voice, video and multimedia at data rates up to and possibly higher than 2 Mbps, offering a consistent set of services to mobile computer and phone users. Based on the Global System for Mobile (GSM) communication standard.

**Unserved**—Those housing units without access to a broadband network capable of offering service that meets the National Broadband Availability Target.

**Very high bit rate Digital Subscriber Line (VDSL)**—A form of DSL similar to ADSL but providing higher speeds at shorter loop lengths.

**Voice Over Internet Protocol (VOIP)**—A family of transmission technologies for delivery of voice communications over IP networks such as the Internet or other packet-switched networks. Other terms frequently encountered and synonymous with VoIP are *IP telephony*, *Internet telephony*, *voice over broadband* (VoBB), *broadband telephony* and *broadband phone*.

**Wideband Code Division Multiple Access (WCDMA)**—Another name for UMTS. Also see Universal Mobile Telecommunications System.

**Wireless ISP (WISP)**—An Internet service provider that provides fixed or mobile wireless services to its customers. Using Wi-Fi or proprietary wireless methods, WISPs provide last mile access, often in rural areas and areas in and around smaller cities and towns. The largest provider of wireless broadband in the U.S. is currently Clearwire Corporation, a WISP that uses an early version of WiMAX to deliver the Internet to customers in the U.S., Ireland, Belgium and Denmark (see WiMAX).

**WiMax**—Worldwide Interoperability for Microwave Access (WiMAX) is a telecommunications technology that uses radio spectrum to transmit bandwidth between digital devices. Similar to WiFi, WiMAX brings with it the ability to transmit over far greater distances and to handle much more data.

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**STATEMENT OF  
CHAIRMAN JULIUS GENACHOWSKI**

*Re: Connect America Fund, WC Docket No. 10-90, A National Broadband Plan for Our Future, GN Docket No. 09-51, High-Cost Universal Service Support, WC Docket No. 05-337*

This item is an important milestone in our deeply important effort to ensure that every American, no matter where they live or what they earn, has access to affordable, high-quality broadband communications service. It will not be easy. But that is what we are committed to do. It is necessary that we do so to promote economic growth, job creation and broad opportunity for all Americans in the 21st Century.

Last month, the Commission delivered to Congress a plan to promote world-leading communications infrastructure in the United States – to match, and surpass, broadband deployment in other countries with which we compete. One of the key components of the National Broadband Plan – and the Commission Joint Statement on Broadband – was comprehensive reform of the universal service program. Today's item is the first in a series of proceedings to implement that vision.

This proceeding will lay the groundwork for a system that provides universal service support for broadband and voice services in an efficient and targeted manner. Today's Notices suggest common-sense reforms to cap growth and cut inefficient funding of voice networks. And they seek comment on the use of a model to assist with determining levels of universal service support for broadband communications, so that rural and other carriers, which have done so much to provide basic telephone service to Americans who otherwise would not have it, can provide 21<sup>st</sup> Century communications services to those Americans. That support must be sufficient to ensure that providers can offer quality broadband service to high cost areas, without unfairly burdening those who ultimately bear the costs of universal service.

The comprehensive universal service reform that the National Broadband Plan envisions will take time, but cannot take too long. We do not want flash cuts. We want a reasonably paced and certain approach to converting universal service to broadband communications. That is why the Plan sets out a step-by-step approach, suggesting that the Commission begin with action, and act steadily and consistently as we work with all stakeholders to get the job done. This item begins that process by seeking the best way to create an accelerated process to fund deployment of broadband networks in unserved areas, while the Commission works on fully implementing the new Connect America Fund.

I thank the staff for their hard work on this item, and I look forward to working with my colleagues to make affordable, high-quality broadband available to all Americans.

**STATEMENT OF  
COMMISSIONER MICHAEL J. COPPS**

*Re: Connect America Fund, WC Docket No. 10-90, A National Broadband Plan for Our Future, GN Docket No. 09-51, High-Cost Universal Service Support, WC Docket No. 05-337*

I approve both the NOI and the NPRM before us as the Commission makes good on its pledge to be fast-off-the-mark in implementing the National Broadband Plan. The comprehensive reform of the Universal Service Fund is, as we've all known for a long time, integral to getting broadband ubiquitously deployed and adopted. Today we begin to move in earnest toward a Twenty-first century Universal Service program that delivers for broadband what Twentieth century Universal Service delivered for voice service—and more.

Comprehensive reform is never painless and when it comes to building a new Universal Service system, shared sacrifice will be required from just about every stakeholder. Maybe, probably, this is why the Commission has never successfully tackled comprehensive Universal Service reform before. Previous Commissions undertook partial fixes and adjustments to existing USF programs to address discrete problems or contain costs. Sometimes real problems were solved, but at other times this approach had the unfortunate consequence of pushing interested parties apart rather than bringing them to the table to pursue workable, long-term solutions.

Today parts of the country have only legacy voice services—sometimes not even that—under the current high-cost Universal Service program, while others have access to truly amazing broadband-capable networks funded indirectly through that same high-cost program. While we often rightly complain about the lapses, we should also recognize the achievements. Regardless of where the funding comes from, I commend those providers who have made broadband deployment a priority. For example, a lot of small rural telcos often went where others feared to tread and brought broadband to some pretty remote places. Their efforts should be not only recognized, but applauded. Now our challenge is to retool the Universal Service system to provide the efficient and targeted support needed to bring high speed, value-laden broadband to all our citizens. The National Broadband Plan commits to such action and today this Commission takes important steps with the NOI and the NPRM.

While I am supportive of most of what we do today, the record will show that I have expressed concerns in the past about some of the suggestions put forward here. In particular, as it seeks to develop a detailed analytic foundation for the distribution of Universal Service support, the NOI places strong emphasis on the use of reverse auctions. When I supported the previous Commission's decision to seek comment on the merits of reverse auctions for distributing Universal Service support, I cautioned that the prospect of using such a mechanism raised many questions that still remain unanswered. For instance, how do we ensure that the winning bidder provides the services for which support is received? What happens if the auction winner decides to discontinue its operation in the supported area? Who will pick up the pieces and how will that be decided? What will be the rules of the road and how will they be established? And enforced? I'm not saying these questions are unanswerable and I am hopeful we will develop an extensive record on these issues, but I do emphasize that answering all these—and I'm sure other—questions and allaying all doubts are the necessary predicates of my support.

The NPRM proposes several options for containing the growth of the high-cost Universal Service program. I have been wary of some of the earlier makeshift attempts by the Commission to curtail the overall size of the Universal Service Fund because these efforts have too often served as delay tactics to avoid the tougher challenge of comprehensive reform. Clearly, the situation has changed with this new Commission, and I recognize that the proposals in the NPRM seek to phase out legacy support while we ramp up direct funding for broadband through the Connect America Fund. We need to do this, no question about it. But let's recognize that many of the proposals in the NPRM—which may very well be necessary and overdue—require major actions that will be burdensome for some, perhaps most, Universal



Service participants. Here, too, compiling a full and viable record is the key to success. And let's also emphasize that while we are shifting Universal Service to support broadband, at the same time we must make sure that voice service is available nationwide. Go to Indian Country to see how much remains to be done on this score.

I commend the Chairman for initiating this very important proceeding in the first month following the birth of the National Broadband Plan. And I thank the staff of the Wireline Competition Bureau for drafting an item that parses out a very complex issue, with, I am sure, more to come. This is the time, more so than any time in the nearly nine years I have been around this place, to truly and comprehensively reform Universal Service. We have the commitment, we have the Plan, and now we begin to implement. This item makes a great start. We begin to glimpse the prize at the end of the road—a first-rate broadband network covering the length and breadth of the nation.

**STATEMENT OF  
COMMISSIONER ROBERT M. McDOWELL**

*Re: Connect America Fund, WC Docket No. 10-90, A National Broadband Plan for Our Future, GN Docket No. 09-51, High-Cost Universal Service Support, WC Docket No. 05-337*

Today we take an important first step on our journey toward badly needed Universal Service reform. USF is America's largest telecommunications subsidy program, which redistributes nearly \$9 billion per year. If we have been able to agree on only one thing at the FCC, it is that the Universal Service subsidy system is antiquated, arcane, inefficient and just downright broken. For instance, since 1998 the contribution factor has increased from 5.53 percent to more than 15 percent today. Positive and constructive change must happen as soon as possible.

In November of 2008, the Commission came close to a bi-partisan, groundbreaking agreement to resolve many of the most vexing challenges facing not only Universal Service but intercarrier compensation as well. Unfortunately, needless roadblocks were thrown in our way. But today we have an opportunity to regain our momentum and pursue honest, constructive and comprehensive reform for the benefit of American consumers.

I therefore support the Notice of Proposed Rulemaking ("NPRM") and Notice of Inquiry ("NOI") regarding Universal Service reform now before us. First, the NOI seeks comments as to whether the Commission should use a cost model for a new support mechanism for broadband. And, if so, the NOI seeks comments on how a model should be structured. Second, the NPRM seeks comments on potential ways to contain the growth of the fund through cuts in the existing system, putting out for comment the cuts that were outlined in the Broadband Plan and also soliciting additional ideas. I am encouraged and pleased that we are seriously examining the possible benefits of employing reverse auctions.

As I have mentioned over the years, comprehensive Universal Service reform must adhere to five basic principles. The Commission should:

- (1) contain the growth of the Fund;
- (2) in a limited and fiscally sound manner, explore the possibility of broadening the base of contributors;
- (3) reduce the contribution burden;
- (4) ensure competitive neutrality; and
- (5) eliminate waste, fraud and other abuses of the system.

To achieve effective and meaningful Universal Service reform, the Commission will need to engage in a complex analysis of potential costs surrounding any changes to the fund. Today's NPRM and NOI start that process.

I thank the Chairman for his leadership in this area. I also thank Sharon Gillett and the diligent team in the Wireline Bureau for your tireless work on these issues. I look forward to working with you and my colleagues on an expeditious, transparent and fair process in pursuit of sensible reforms.

**STATEMENT OF  
COMMISSIONER MIGNON L. CLYBURN**

*Re: Connect America Fund, WC Docket No. 10-90, A National Broadband Plan for Our Future, GN Docket No. 09-51, High-Cost Universal Service Support, WC Docket No. 05-337*

With this item we embark upon an ambitious and long-overdue mission: the comprehensive reform of our universal service system to support broadband in geographic areas where there is no business case to deploy or operate broadband. In order for us to successfully accomplish this mission, we must begin with a good road map. The item before us identifies the issues to consider when devising our map. I thank the staff for their hard work in identifying these issues in the National Broadband Plan and for their effort on this item.

While the start of any journey can be very exciting, it also can be fraught with anxiety. I recognize there are many reasons for industry to be apprehensive. However, I hope as we begin the discussion of how to design a new support system and realize cost savings in our current system that we remain focused on our essential goal of fully connecting all Americans to voice and broadband services.

**STATEMENT OF  
COMMISSIONER MEREDITH A. BAKER**

*Re: Connect America Fund, WC Docket No. 10-90, A National Broadband Plan for Our Future, GN Docket No. 09-51, High-Cost Universal Service Support, WC Docket No. 05-337*

As I have said many times, I believe that it is critical that we move toward comprehensive reform of the Universal Service Fund, targeted to broadband investment. As a nation, we need to transition to a support mechanism that is effective, efficient, and sustainable for areas where market forces are not sufficient to drive broadband services to America's consumers. The Notice before us is an important first step down that road. Universal service reform will be a challenging—and perhaps sometimes frustrating—endeavor. I have expressed concerns about the ballooning size of the Fund and I am convinced that some hard choices will have to be made to keep it under control. But I am convinced that we have a window of opportunity to finally make the changes that this program desperately needs. I also strongly support seeking comment on the possible implications of using a cost model in a new support mechanism for broadband and I hope to see active participation from all sectors of industry and the public. Building a strong record to be the foundation for reform is always important—but never more so than when we consider whether to adopt, and if so, how to structure a cost model. I look forward to working with the Chairman and my fellow commissioners to tackle universal service reform, and I would like to thank the staff for their thoughtful work on this item.